

ABSTRACT OF THE DISCLOSURE

Stimulating rays are linearly irradiated onto an area of a surface of a stimuable phosphor sheet, light emitted by the sheet is collected with a light collecting optical system, and the collected light is detected with a line sensor. An end face of an optical device constituting the light collecting optical system, which end face stands facing the sheet, is formed into a shape such that the stimulating rays, which have been reflected from the surface of the sheet, are reflected by the end face toward the linear area of the sheet exposed to the linear stimulating rays or toward a region of the sheet, which region is located more forward, with respect to a sub-scanning direction, than the linear area of the sheet exposed to the linear stimulating rays.